SCHOOL SMART CARD & ACCESS CONTROL SOLUTION BRIEF

Presented By
Tovuti Group Ltd
WHO WE ARE
Tovuti group is an innovative IT company whose sole purpose is to simplify business management via software solutions that are easy to use, easy to deploy and easy on your budget, yet comprehensive enough to meet and surpass your business needs. Our main aim is to ensure your business is not held back by the lack of modern technology. In a nutshell, we provide technology that is designed to work with and for your business. Technology that is simply indispensable for any retail business seeking to grow its revenue.

OUR MISSION
Is to provide world class retail ICT solutions to business with an aim of improving efficiency, growing the business brand, increasing revenue and hastening the rate of return on investment.

VISION
Our vision is to be the preferred retail ICT solutions provider in east and central Africa with a presence in all the countries in this region.
Solution Overview

Access Control, Time & Attendance and Cashless Smart Card Environment
Our solution comprises of three independent systems fused into one to provide a hybrid solution that can be used by any school to provide access control, time & attendance and cashless smart card environment by use of cards within the school grounds. The three systems are:

1) **Cashless Smart Card Environment System:** Will comprise,
   - A complete POS including hardware and software.
   - A cloud server backend for managing products, staff and payments
   - A card top up system accepting cash and M-pesa
   - NFC smart cards to be used by students to pay at the cafeteria.
   - NFC smart cards to be used in libraries to borrow books and pay for fines.

2) **Access Control System:** Will comprise,
   - Access control devices.
   - NFC cards to be used by students to gain access to school premise and to clock-in
   - NFC cards to be used to access the library via optical flap barriers
   - A cloud server for managing the access control system.
   - A dedicated visitor management module

3) **Time and Attendance System:** Will comprise,
   - Time and Attendance device i.e. both portable and non-portable.
   - NFC cards to be used by students and staff to clock-in
   - A cloud server for managing the time and attendance system.

The three will be designed to work seamlessly from the cloud. A layout of how this will work is given next.
Access Control

All staff and students will be registered into the access control system. Data to be captured includes, fingerprints (for biometric access), Bio profiles i.e. Names, Gender, Photo e.t.c, Contact info i.e. email, phone e.t.c, Card Number for card based access and Access levels/ rights. Once complete, students & staff can safely access approved areas via finger, card or pin authentication. All access is logged and can be viewed/ reviewed in real time via a centralized management portal. Access control will extend to the library where bonafide library users will be granted access via card swipe on library entry points.

Visitors can be handled via a dedicated visitor module which allows for real time registration at entry points. Info to be captured includes; Visitor bio-data, Vehicle plate, Counts of previous visits, Host & department visited and Reason of visit.

Access Control Requirements

- Access control barrier at all requisite points.
- Access control gadgets i.e. readers at all requisite points
- Security management portal to manage users, access criteria and log usage.

How it Works

Access Control

This payment solution allows for prepaid card functionality. Students and Staff are issued with cards which are tied to their school accounts. This allows them to make purchases at all school outlets that take payments. This includes school cafeterias, bookshops & even the library for payment of fines or lost books. The students and staff can top their accounts via mobile money or cash through the bursar/ school cashier. As a bonus, parent can define wallets that limit how much a student can spend per day, per week or even per month as well as what they are allowed to purchase. This can be done via a dedicated self management portal that the parents can access. The cards can also be use to process borrowing of books at the library as well as pay fines for late returns or lost books via simple swipe of a card at library processing points. This requires some integration to our systems.

School Cashless Smart Card Environment

Cashless Environment Requirements

- POS gadgets at all payment points.
- Payments processing platform from Tovuti
- Pre-configured closed loop payments cards for staff and students.
- An active subscription to Paybill, Lipa Na Mpesa or Airtel money service for mobile money card topups
Solution Core Features

ACCESS CONTROL

1. All-In-One solution (Access Control, Video Surveillance and Elevator).
2. Dedicated visitor management.
3. Many Doors Management Capacity (Up to 2,000 doors in Single Server).
5. Global Anti-Passback and Linkage.
6. Specialized library entry control via optical flap barriers.
7. Video Integration with Third Party Device.
8. Automatic Data Backup.
9. Alarms and Events Email Notifications.

CASHLESS SMART CARD ENVIRONMENT

1. POS stations for both sales and topups.
2. Integration to school library system for book borrowing and fines payments.
3. Usage limit definitions by product, day, time, amount, POS station e.t.c.
4. Mobile money top-ups for the cards.
5. Top up limits definition for both card holders & cashiers/ bursars.
7. Offline operation with automatic syncing to cloud or central server.
8. Parents portal for students card account management and reports viewing.
9. Integration to school library to handle processing of fines.

TIME & ATTENDANCE

1. Automatic Attendance Management
2. Flexible Shift Scheduling
3. Real-time Data Transmission and monitoring
4. Attendance Calculation & Reports
5. Students/ Staff Self-Service Enquiry System
6. Automatic email notifications
7. Portable attendance management via dedicated biometric tablets.
8. Both fixed and portable attendance management.
We are always coming up with ways to make sure our solutions fit your business environment. Whether this requires a change in technology or equipment, you will always be guaranteed of a solution that can work without losing the bigger picture.

We work with one team principle i.e “The customers businesses processes must always guide how our solutions work”. We strive to ensure that our products always conform to market and industry standards.

We understand that even after a thorough solution specification, new needs and requirements will always arise. We strive to adapt our solutions to cover any new developments that are of importance to you. Whether introduced after the projects starts or even after completion.

Our customers come first in everything we do. We ensure that you get support as you need it, when you need it. No limiting or capping of support hours. We understand that when you fail we fail too.
Case Studies - Overview

THE CLIENT | RIARA UNIVERSITY

WHAT WAS THE CHALLENGE?
Riara University, which holds a modern campus along Mbagathi way, wanted a solution that would enable them manage time and attendance, school cafeteria, library and student center operations using a single card. Not only did the university need a student and staff card, but they also wanted to address cash handling within the school compound. In addition, the university was looking to offer one card that could be used in all their departments hence saving the staff and students from carrying multiple cards for identification, access and payment. They were looking for a solution that was:

- Convenient and easy-to-use by students, teachers and staff.
- Robust and Flexible.
- Extensible.
- Interoperable and could work with existing systems in the school

THE SOLUTION
We deployed an access control, time & attendance and cashless system to help Riara University meet their needs.

- **Cashless Environment System**: We offered full POS stations that could accept internal card for cafeteria, tuck shops, book shop and library payments.
- **Access Control System**: We offered an access control system that comprised devices that would fit at their Main Gates to capture attendance and control entry into the university. The students were registered into the Riara university school system and the data pushed automatically to our system to allow biometric registration and issuance of cards. The students could then use the cards for payments, library access and general campus access.

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Our Clients

Retail & Fuel Sector
- HASHI ENERGY
  Location: Kenya & Rwanda
- NAS AIRPORT SERVICES
  Location: Kenya
- MT. MERU PETROLEUM
  Location: Tanzania & Rwanda

Govt & Financial Sector
- TAITA TAVETA COUNTY GOVERNMENT
  Location: Kenya
- COMMERCIAL BANK OF AFRICA
  Location: Kenya
- GATEWAY INSURANCE
  Location: Kenya

Other Sectors
- BRITISH AMERICAN TOBACCO
  Location: Kenya
- RIARA UNIVERSITY
  Location: Kenya
- BANIADAM ORGANIZATION
  Location: Kenya & Somalia
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